IN THE SPECIFICATION:

Please rewrite the paragraph appearing at page 13, line 27, through page 14, line 15, as follows:

--As shown in Fig. 3, a three-dimensional look-up table (3D-LUT) 31 outputs table data corresponding to the four higher order bits (for a total of 12 bits) of each of items of input luminance data Rin, Gin, Bin (eight bits each). Data R_0, G_0, B_0 output from the 3D-LUT 31, and four lower order bits (for a total of 12 bits) of the input luminance data Rin, Gin, Bin, enter an interpolator 32 that proceeds to execute an interpolation operation and produce output luminance data Rout, Gout, Bout (eight bits each). The table capacity of the 3D-LUT 31 can be reduced by virtue of such interpolation. It should be noted that the number of lattice points of the 3D-LUT 31 is decided by the quality of the image handled and represents a balance between the characteristics on the output side and the capacity of the table.--.

Please rewrite the paragraph appearing at page 15, lines 1-10, as follows:

--In a case where the input luminance data Rin, Gin, Bin corresponds to the lattice points, the output data R_0, G_0, B_0 can be obtained directly from the table. However, it is impractical to prepare a table having input/output relationships for $256^3 = 16,770,000$ colors for all inputs of eight bits for each of the colors R, G, B. Accordingly, output data other than that at the table lattice points (representative points) ~~shall~~ will be calculated by the interpolation processing, described below, executed by the interpolator 32.--.

Please rewrite the paragraphs appearing at page 15, lines 1-22, as follows:

--In a case where the input luminance data Rin, Gin, Bin corresponds to the lattice points, the output data R_0, G_0, B_0 can be obtained directly from the table. However, it is impractical to prepare a table having input/output relationships for $256^3 = 16{,}770{,}000$ colors for all inputs of eight bits for each of the colors R, G, B. Accordingly, output data other than that at the table lattice points (representative points) ~~shall~~ will be calculated by the interpolation processing, described below, executed by the interpolator 32.

When the input luminance data is applied to space (a hexahedron) delimited by a 17 x 17 x 17 lattice, the relationships among the surrounding eight lattice points are decided as points included in the hexahedron. Output luminance data Rout, Gout, Bout can be calculated from the output data R_{0i}, G_{0i}, B_{0i} (i = 1 to 7) corresponding to these eight lattice points. However, if points (input luminance data) included in the hexahedron are defined as eight lattice points, calculation will be too complicated. Accordingly, the space (the hexahedron) is further subdivided by tetrahedrons each connecting four lattice points.--.

Please rewrite the paragraphs appearing at page 18, line 27, through page 19, line 15, as follows:

--Furthermore, according to this embodiment, with a view to reducing the processing load, a high-order bit extraction circuit 205 extracts three higher-order bits each (for a total of nine bits) from the components of the CMY data (which has a total of 24 bits) to which the color difference data has been added and inputs these bits to the output-color table.

More specifically, the data of the total of nine bits output from the high-order bit extraction circuit 205 is input to a table memory 210, in which the output-color table has been stored, via a RAM interface 209. ~~Data~~ Print data (an output pattern) of one bit for

each of the colors C, M, Y, K, which data is print data corresponding to the data of the total of nine bits, is output to a buffer circuit 211 via the RAM interface 209.--.

Please rewrite the paragraph appearing at page 21, line 24, through page 22, line 4, as follows:

--By way of example, when data is written in the order of addresses R, G, B [[at]] <u>in</u> the processing of step S103, the system counter starts counting clock pulses using the writing of data to address B as a trigger. The system counter is cleared by software or by next writing of data to address R.--.

Please rewrite the paragraph appearing at page 22, line 24, through page 22, line 15, as follows:

--Next, color difference data CL of the preceding line to be diffused to a pixel to be processed is read out of the preceding-line color difference memory 213 (S107). The color difference data CL will be described later in greater detail. Next, as shown in Fig. 8, the color difference data CL of the preceding line and color difference data CP of the preceding pixel (the pixel processed immediately previously) are added by the color difference adding circuit 204 to data Ci of the pixel undergoing processing (S108), and the sum Ci + CL + CP is stored in the buffer of the color difference adding circuit 204 as data ILPC. This buffer is capable of storing data of a signed 11-bit width (-512 to +512). In order to arrange it so that the buffer will not overflow, the data ILPC is rounded off to 512 if it exceeds 512, thereby making it possible to reduce the scale of the color difference adding circuit 204 <u>while limiting the reduction</u> to a degree that will not affect the image.--.

Please rewrite the paragraph appearing at page 23, line 24, through page 24, line 5, as follows:

--Next, the three higher-order bits of each of the calculated items of data ILPC, ILPM and ILPY are extracted [[to]] thereby to generate address data ILPC', ILPM' and ILPY' (S109), each item of address data is input to the output-color table shown in Fig. 9, the output pattern (C_0, M_O, Y_O and K_0) nearest to the color of the input data in color space is acquired and the pattern is stored in a register. The output-color table is constructed as follows:--.

Please rewrite the paragraph appearing at page 24, line 21, through page 25, line 4, as follows:

--~~In order~~ If this calculation is used to obtain the output color data of each pixel, the load on software and hardware becomes extremely heavy, and a long period of time is needed for processing when the above-described calculation is performed. Accordingly, in this embodiment, the result of the above calculation is stored in a table beforehand and the output pattern (K_0, C_O, M_O and Y_0) nearest to the color of the input data in color space is found at high speed based upon the input data ILPC, ILPM, ILPY that takes color difference into account.--.

Please rewrite the paragraph appearing at page 26, lines 11-26, as follows:

--By reading the data that is the result of replacement out of the buffer every eight pixels, the number of times the CPU 11 acquires access is reduced. Further, if the data processing method of the printing unit 4 is performed line by line, the load involved in rearranging the data by the software can be alleviated. Further, if the output data in the

sub-scan direction is two ~~pixel's~~ pixels' worth, the outputs bits can be isolated and written to another register, whereby they can be output to the printing unit 4 as data of another line. It should be noted that if the CPU 11 has a transfer mode in which transfer is performed on a per-word (16-bit) basis, two registers each may be assigned to each of C, M, Y and K and it may be so arranged that data is read out at the moment 16 pixels of data have been stored.--.

Please rewrite the paragraphs appearing at page 30, line 23, through page 31, line 24, as follows:

--Consider a case where there are no Y and K dots. In a case where [[of]] C=0, M=0, neither of the dots are printed and the color obtained is white (the color of the printing medium). In a case where [[of]] C=1, M=0, only the C dot is printed; in a case where [[of]] C=2, M=0, two C dots are printed; and in a case where [[of]] C=2, M=2, two C dots and two M dots are printed. As a result, the number of color spaces that can be expressed equals ~~the number of which is~~ the number of combinations of Y and C, M and Y and each color and K ~~can be expressed~~ (see Fig. 14).

Arithmetically speaking, $3^4 = 81$ combinations are conceivable. However, colors that can be reproduced satisfactorily even if other combinations are substituted in terms of color space, such as (C,M,Y,K) = (1,1,1,2), and combinations that cannot be used owing to restrictions such as limitations upon the amount of ink that can be printed, are excluded. The remaining combinations of output patterns are printed as color patches on the actual printing medium and printed color patches are measured by colorimetry. In other words, the color space of data obtained by reading in color patches using the reader 14 is transformed by the color space transformation circuit 202. Data obtained from each of the

color patches is put into the form of a table as shown in Fig. 15 using the colorimetric data obtained as Cp, Mp and Yp.--.